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MS. MARY PAYTON WALL
BUREAU OF AIR
SC DHEC
2600 BULL STREET
COLUMBIA, SC 29201



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or PO Box No. 2600 Bull St
City, State, ZIP+4
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6048 5218 0000 0262 2102



888 Woodstock St. Georgetown, SC 29440
TEL: 843-546-8556 FAX: 843-546-0007

August 24th, 2016

Ms. Mary Peyton Wall
Bureau of Air
SC Dep't of Health and Env. Control
2600 Bull St.
Columbia, SC 29201

Dear Ms. Wall:

Enclosed is the first half 2016 semi-annual report for 3V Sigma USA. for the MON. If there are any questions please contact me at 843.520.5146 (s.mcnaair@3vusa.com) and/or Vince Centioni at 843.520.5128 (v.centioni@3vusa.com).

Sincerely,

A handwritten signature in black ink, appearing to read 'Scott McNair'.

Scott McNair
VP of Plant Management



888 Woodstock St. Georgetown, SC 29440
TEL: 843-546-8556 FAX: 843-546-0007

August 24th, 2016

Ms. Mary Peyton Wall
Bureau of Air
SC Dep't of Health and Env. Control
2600 Bull St.
Columbia, SC 29201

Dear Ms. Wall:

Enclosed is the first half 2016 semi-annual report for 3V Sigma USA. for the MON. If there are any questions please contact me at 843.520.5146 (s.mcnair@3vusa.com) and/or Vince Centioni at 843.520.5128 (v.centioni@3vusa.com).

Sincerely,

Scott McNair
VP of Plant Management

**SUBPART FFFF (MON) COMPLIANCE
REPORT**

Semiannual Report

for

3V Sigma USA

Covering
January 1, 2016
through
June 30, 2016

Submitted on August 30, 2016

MON Compliance Report

63.2520 (e) (1) Company Name and Address	
Company Name	3V, Sigma USA.
Street Address	888 Woodstock Street
City, State Zip Code	Georgetown, SC 29440
Mailing Address:	888 Woodstock Street
City, State Zip Code	Georgetown, SC 29440
Contact Person	Vince Centioni
Title	Environmental Manager
Telephone	843.520.0128
Fax	843.546.0007

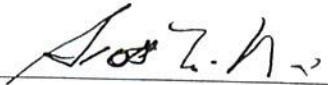
63.2520 (e) (2) Certification of Truth, Accuracy, and Completeness	
Last Name	McNair
First Name	Scott
Title	Plant Manager
Telephone	843-520-0146
Fax	843-546-0007
<p>I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in these documents are true, accurate and complete.</p>	
Name (signed)	
Name (printed)	Scott McNair
Date	08/24/2016

TABLE OF CONTENTS

1. INTRODUCTION
2. MON COMPLIANCE REPORT RESPONSES
3. ATTACHMENTS
 - A. Excess Emission Events from Start Up, Shutdowns or Malfunctions
 - B. Information On Deviations For Systems Without CMS
 - C. Information On Deviations On Systems With CMS
 - D. Copies of Operating Logs of Sources Using CMS for Compliance (68H002 Thermal Oxidizer).
 - E. Operating Scenarios
 - F. Report for Subpart UU (LDAR Summary).

1. INTRODUCTION

3V Sigma USA is subject to the Miscellaneous Organic NESHAP 40 CFR Part 63 Subpart FFFF for organic chemical manufacturing processes in unit ID's 04, 05, 06 and 07. The facility is also subject to the Pharmaceutical MACT 40 CFR Part 63 Subpart GGG in unit ID 04. The purpose of this notification is to document the facility's compliance status with Subpart FFFF.

This report has been formatted by following the periodic report section of Subpart FFFF located in 63.2520 (e). Specific CFR citations are listed in their order with a response to each. In some cases it was convenient to prepare the information requested in a separate report. In these cases that report is provided as an attachment.

2. MON COMPLIANCE REPORT RESPONSES

63.2520 (e) (4) *Records showing that for each SSM during which excess emissions occurred, procedures specified in the SSMP were followed. Documentation of actions taken that were not consistent with SSMP. Brief description of each malfunction.*

Provided in Attachment A is a list SSM events that may have resulted in excess emissions. This list comprises all events involving a malfunction or shutdown of control devices. The facility SSM Plan requires operators to reduce production activity to minimize emissions during control device service interruption until the unit can be restarted or back-up systems can be put in place.

During the reporting period there were scheduled holiday production shutdowns on New Years Day, Good Friday, and Memorial Day. The weekly production schedule was Monday – Saturday. CMS for the TOx & Flare was lost on 3/13/16 and 4/4/16 for 2.5 hrs due to RS view communication loss to the server from power outages. During each event the control devices maintained performance test temperature limits (~ 1500 F TOx). The facility nitrogen supplier – Air Liquide installed a check valve on the pipe that supplies liquid nitrogen from the storage tank to CE-01/02. The valve was wrapped in 8 inches of insulation thereby making it unaware to facility personnel. On June 10th around 14:00 the Air Liquide check valve broke and the liquid nitrogen flow was restricted from the storage tank to CE-01/02. The failure caused the facility to exceed daily average temperature limits from June 11th – June 28th. The daily average limit was established by engineering design evaluations and initial control device performance tests. Detailed maintenance records are attached. See Table 63.2520(e)(5)(iii)(L).

63.2520 (e) (5) (i) *Statement indicating there were no deviations from any emission limit, operating limit, or work standard during the reporting period.*

Not Applicable.

63.2520 (e) (5) (ii) *For each deviation from an emission limit, operating limit, and work standard that occurred at an affected source where CMS is NOT used to comply with same provide the following....*

63.2520 (e) (5) (ii) (A) *Total operating time of the affected source during the reporting period,*

Total operating time during reporting period was 3672 hours.

63.2520 (e) (5) (ii) (B) *Information on number, duration, and cause of deviations, and corrective action taken for deviations including periods of SSM.*

No deviations from systems where CMS is NOT used to comply with regulations.

63.2520 (e) (5) (ii) (C) *Copies of operating logs of processes with batch vents from batch operations on day(s) during which deviation occurred for those deviations from emission limits, operating limits, and work standards, occurring at an affected source where CMS is NOT used to comply with same. Include periods of SSM.*

Not applicable.

63.2520 (e) (5) (iii) *For each deviation from an emission limit or operating limit occurring at an affected source where you are using a CMS to comply with an emission limit in this subpart, include the following information:*

63.2520 (e) (5) (iii) (A) *Dates and times that each CMS was inoperative for sources where CMS is used to comply with emission limits and operating limits.*

See Attachment B for CMS downtime details.

63.2520 (e) (5) (iii) (B) *Date, time, and duration that each CMS was out-of-control.*

No periods of CMS out-of-control during this reporting period.

63.2520 (e) (5) (iii) (C) *Date and time that each deviation started and stopped, and information on whether the deviation occurred during SSM, for deviations at sources where CMS is used to comply with emission limits and operating limits.*

See Attachment C.

63.2520 (e) (5) (iii) (D) *Summary of the total duration of deviations occurring during the reporting period, and total duration as a percent of the total operating time of the affected source where CMS is used to comply with emission limits and operating limits.*

See the table that follows.

Table 63.2520 (e) (5) (iii) (D) Summary of Total Duration of Deviations Occurring During the Reporting Period, and Total Duration as a Percent of the Total Operating Time			
Parameter	Monitor	Duration of Exceedances, hr	Percentage of exceedances, %
CE-01/CE-02 – (CryoCond temp)	TI-26/TI-27	304	8.3

There are deviations from the temperature limits listed in Table 63.2520 (e) (5) (iii) (I) below from the cryogenic condensers. The thermal oxidizer temperature was not below the limit in Table 63.2520 (e) (5) during production operating time in this reporting period.

63.2520 (e) (5) (iii) (E) Breakdown of total duration of deviations into startup, shutdown, control equipment problems, process problems, other known causes, and unknown causes for deviations at sources where CMS is used to comply with emission limits and operating limits.

See table that follows.

Table 63.2520 (e) (5) (iii) (E) Breakdown of Total Duration of Deviations into Various Categories - 68H001/002 & CE01/02						
Control Device	Startup	Shutdown	Control Equipment Problems, (hr)	Process Problems	Other Known Causes	Other Unknown Causes
68H001	0	0	0	0	0	0
68H002	0	0	0	0	0	0
CE01/02	0	0	304	0	0	0

63.2520 (e) (5) (iii) (F) *Summary of total duration of CMS downtime during reporting period, and as a percent of the total operating time of the affected source where CMS is used to comply with emission limits and operating limits.*

See table that follows.

Table 63.2520 (e) (5) (iii) (F)				
Summary of Total Duration of CMS Downtime.				
Device	Monitor	Parameter	Duration of downtime [hours]	Percentage of downtime [%]
68H001	68TT6001	Temperature	2.5	0.07
68H002	68TT300_3	Temperature	2.5	0.07
01CE01 & 01CE02	01 TI 26 & 01 TI 27	Temperature	0.0	0.0

63.2520 (e) (5) (iii) (G) *Identification of each HAP known to be in the emission stream from each source where CMS is used to comply with emission limits and operating limits.*

See table that follows.

Table 63.2520 (e) (5) (iii) (G) HAP's in Emission Streams.	
Device ID using CMS	List of Known HAP's in Emission Stream
68H002	Acetaldehyde, Acrylamide, Ethyl acrylate, Methanol, Vinyl Acetate, Xylene
01CE01 & 01CE02	Methylene Chloride

63.2520 (e) (5) (iii) (H) *Brief description of process units.*

The facility consists of batch chemical manufacturing process units, wastewater treatment units, storage tanks, and air pollution control equipment for the reduction of organic HAP's including: two thermal oxidizer units (68H001 and 68H002) and a cryogenic condenser system, 01CE01, 01CE02. All batch process vents containing methylene chloride are routed to the cryogenic condenser. For the process vents, the cryogenic condenser has been determined to be a process condenser and the vents are collectively Group 2. For storage tanks the cryogenic condenser has been determined to be a control device. There are no continuous process sources.

The affected source includes the MCPU's listed in the table that follows.

Table 63. 2520 (e) (5) (iii) (H) Chemical Manufacturing Processes Operating during the reporting period.	
MCPU	Chemical Manufacturing Processes
04 – Alpha/Beta/Epsilon Plant	Extrapin, Tabanol K, Tabanol NA, Tabanol G, Tabanol 5, Tabanol E, and Tabanol P.
05 – Gamma Plant	Tabanol 5
06 – Delta 1 Plant	Efram CR, Tabanol 1 and Tabanol 2
07 – Delta 2 Plant	Tabanol 5

63.2520 (e) (5) (iii) (I) Brief description of CMS:

There were three control devices used by the facility for compliance with Subpart FFFF during the reporting period. These include flare 68H001, thermal oxidizer 68H002 and the cryogenic condensation system 01CE01 and 01CE02. Flare 68H001 serves as a back up to the thermal oxidizer for downtime due to malfunctions and routine scheduled maintenance. The table that follows lists the continuous monitoring for each device.

Table 63.2520 (e) (5) (iii) (I) Parametric Monitoring Required for Control Devices.				
Device	Parameter	Basis for Parameter	Limit	Basis for Limit
68H001	Combustion Temperature	63.988(c)(1)	1464 °F	Average temperature from test
68H002	Combustion Temperature	63.988(c)(1)	1476 °F	Average temperature from test
01CE01	Condenser temperature	63.985(c)	-49 °F	Temperature from design evaluation
01CE02	Condenser temperature	63.985(c)	-49 °F	Temperature from design evaluation

63.2520 (e) (5) (iii) (J) Date of latest CMS certification or audit:

See table that follows.

Table 63.2520 (e) (5) (iii) (J) CMS Certification/Audit Dates.		
Device ID	Monitoring Equipment	Date of Latest CMS Certification/Audit
68H002 Thermal Oxidizer	68TT300-3	07/26/2016
68H001 Ground Flare	68TT6001	07/19/2016
01CE01 Cryogenic Condenser	01TI 26	08/15/2016
01CE02 Cryogenic Condenser	01TI 27	08/15/2016

63.2520 (e) (5) (iii) (K) *Operating logs of processes with vents from batch processes for each day of a deviation where CMS is used to comply with deviations from emission limits and operating limits:*

See Attachment D

63.2520 (e) (5) (iii) (L) *Operating day average values of monitored parameters for each day during which there was a deviation for sources where CMS is used to comply with emission limits and operating limits:*

Table 63.2520 (e) (5) (iii) (L) Operating Day Average Values for Each Exceedance Date.			
Date	Device	Monitor	Average, °F
06/11/16	01 CE01/02	01TI 26 & 01TI 27	-7.2
06/13/16	01 CE01/02	01TI 26 & 01TI 27	7.4
06/14/16	01 CE01/02	01TI 26 & 01TI 27	-1.3
06/15/16	01 CE01/02	01TI 26 & 01TI 27	46.1
06/16/16	01 CE01/02	01TI 26 & 01TI 27	33.7
06/17/16	01 CE01/02	01TI 26 & 01TI 27	28.3
06/18/16	01 CE01/02	01TI 26 & 01TI 27	39.1
06/20/16	01 CE01/02	01TI 26 & 01TI 27	2.7
06/22/16	01 CE01/02	01TI 26 & 01TI 27	-6.8
06/23/16	01 CE01/02	01TI 26 & 01TI 27	21.8
06/24/16	01 CE01/02	01TI 26 & 01TI 27	29.1
06/25/16	01 CE01/02	01TI 26 & 01TI 27	42.7
06/27/16	01 CE01/02	01TI 26 & 01TI 27	-36.7
06/28/16	01 CE01/02	01TI 26 & 01TI 27	-45.5

Note:

The unit never shut down during each cited day. After an internal investigation it was brought to 3V's attention that the liquid nitrogen supply from the tank was being restricted due to a broken check valve wrapped under 8 inches of insulation. The valve was installed and under the responsibility of the 3V's nitrogen supplier – Air Liquide. At no time were 3V personnel aware such a check valve existed until after Air Liquide admitted to that being the root cause. Considering the lack of communication and response from the vendor/nitrogen supplier (Air Liquide) 3V has filed a formal customer complaint.

63.2520 (e) (5) (iv) *Records associated with each calculation required by 63.2525 (e) that exceeds an applicable HAP usage or emissions threshold:*

Emission calculations used to designate Group 2 process vents in the NOCS. No Group 2 process vents relying on HAP usage demonstration.

63.2520 (e) (6) *Statement indicating no periods of out-of-control CEMS:*

Not applicable. Facility does not use CEMS for compliance with Subpart FFFF.

63.2520 (e) (7) *New operating scenarios not already submitted:*

See Attachment E for new operating scenarios since last periodic report. Emissions from this source were included in the construction permit application for the installation of the cryogenic condensation system (CP-FJ).

63.2520 (e) (8) *Records of process units added to a PUG; records of primary product re-determinations:*

Not applicable.

63.2520 (e) (9) *Records and information for periodic reports as specified in referenced subparts F, G, H, SS, UU, WW, and GGG of this part, and subpart F of 40 CFR 65:*

Information requested in Subpart SS is provided in sections 63.2520 (e)(5)(iii) of this report. See Attachment F for Subpart UU report.

63.2520 (e) (10) *Process changes:*

Not applicable.

ATTACHMENT A **Excess Emission Events from Start Up, Shutdowns, or Malfunction**

Fail Date	Fail Time	Duration Hours	Unit	SSMP Followed?	Cause – Corrective Action
Thermal Oxidizer and Ground Flare					
1/6/2016	1520	0.25	68H002	Yes	High inlet temperature. Reset Restart.
1/6/2016	2315	0.25	68H002	Yes	High inlet temperature. Reset Restart.
1/7/2016	0235	0.1	68H002	Yes	High combustion temp. Restarted. Flare on.
1/7/2016	0550	0.1	68H002	Yes	High combustion temp. Restarted. Flare on.
1/7/2016	1633	1.5	68H002	Yes	Power lost. Restarted flare at 17:30.
1/8/2016	1855	0.6	68H002	Yes	Flame failure. Flare on line. Restarted.
1/9/2016	0700	3.0	68H002	Yes	High combustion temp. Flare online. Restart.
1/18/2016	1545	0.5	68H002	Yes	High temp. Restarted.
1/26/2016	0045	9.6	68H002	Yes	High temp. Flare online. E&I called in.
1/27/2016	0730	0.1	68H002	Yes	High combustion temp. Restarted. Flare on.
2/2/2016	0700	0.25	68H002	Yes	High combustion temp. Restarted. Flare on.
2/2/2016	1320	1.0	68H002	Yes	High combustion temp. Restarted. Flare on.
2/3/2016	1945	3.0	68H002	Yes	High combustion temp. Restarted. Flare on.
2/12/2016	1620	0.2	68H002	Yes	High combustion temp. Restarted. Flare on.
2/18/2016	1430	5.0	68H002	Yes	High combustion temp. Restarted. Flare on.
2/21/2016	1315	1.0	68H002	Yes	High combustion temp. Restarted. Flare on.
2/21/2016	1600	1.5	68H002	Yes	High combustion temp. Restarted. Flare on.
2/22/2016	1515	12.0	68H002	Yes	High combustion temp. Restarted. Flare on.
2/24/2016	0240	0.2	68H002	Yes	High combustion temp. Restarted. Flare on.
2/24/2016	0540	0.1	68H002	Yes	High combustion temp. Restarted. Flare on.
2/24/2016	0810	0.1	68H002	Yes	Flame failure. Retart. Flare on.
2/24/2016	1845	0.5	68H002	Yes	Flame failure. Retart. Flare on.
3/2/2016	1015	0.5	68H002	Yes	Shut down to replace aire inlet stack. Restart.
3/3/2016	2200	0.1	68H002	Yes	Flame failure. Retart. Flare on.
3/3/2016	2225	0.1	68H002	Yes	High combustion temp. Restarted. Flare on.
3/4/2016	0015	2.0	68H002	Yes	High combustion temp. Restarted. Flare on.
3/8/2016	0515	0.25	68H002	Yes	High combustion temp. Restarted. Flare on.
3/9/2016	0035	3.0	68H002	Yes	High combustion temp. Restarted. Flare on.
3/9/2016	0500	1.0	68H002	Yes	Off and and on from comb.temp high. Restart.
3/10/2016	1200	0.2	68H002	Yes	High combustion temp. Restarted. Flare on.
3/10/2016	1525	1.0	68H002	Yes	High combustion temp. Restarted. Flare on.
3/11/2016	1445	1.5	68H002	Yes	High combustion temp. Restarted. Flare on.
3/14/2016	0820	1.7	68H002	Yes	High combustion temp. Restarted. Flare on.
3/15/2016	1725	2.9	68H002	Yes	High combustion temp. Restarted. Flare on.
3/19/2016	1108	0.5	68H002	Yes	High combustion temp. Restarted. Flare on.
3/22/2016	1220	3.0	68H002	Yes	High combustion temp. Restarted. Flare on.
3/22/2016	2300	12.0	68H002	Yes	Off and and on from comb.temp high. Restart.
3/23/2016	0132	1.0	68H002	Yes	Off and and on from comb.temp high. Restart.
3/23/2016	1315	0.7	68H002	Yes	Flame failure. Restart.
3/23/2016	2211	0.1	68H002	Yes	Flame failure. Restart.
3/30/2016	1600	0.1	68H002	Yes	High temp flame arrestor inlet top. Restart.
3/31/2016	1818	0.8	68H002	Yes	High combustion temp. Restarted. Flare on.
					High combustion temp. Restarted. Flare on.

4/5/2016	1533	1.4	68H002	Yes	Off and and on from comb.temp high. Restart.
4/6/2016	1440	1.7	68H002	Yes	Off and and on from comb.temp high. Restart.
4/7/2016	1113	0.25	68H002	Yes	Off and and on from comb.temp high. Restart.
4/7/2016	1725	0.4	68H002	Yes	Off and and on from comb.temp high. Restart.
4/8/2016	2150	0.4	68H002	Yes	Off and and on from comb.temp high. Restart.
4/10/2016	0915	0.15	68H002	Yes	Actuator failure. E&I. Restart.
4/10/2016	1910	0.5	68H002	Yes	High combustion temp. Restarted. Flare on.
4/11/2016	1000	1.0	68H002	Yes	High combustion temp. Restarted. Flare on.
4/12/2016	1030	0.5	68H002	Yes	High combustion temp. Restarted. Flare on.
4/12/2016	1130	1.0	68H002	Yes	High combustion temp. Restarted. Flare on.
4/13/2016	2330	1.0	68H002	Yes	High combustion temp. Restarted. Flare on.
4/14/2016	0045	0.1	68H002	Yes	High combustion temp. Restarted. Flare on.
4/15/2016	1130	1.0	68H002	Yes	High combustion temp. Restarted. Flare on.
4/21/2016	1657	0.1	68H002	Yes	High combustion temp. Restarted. Flare on.
4/22/2016	0323	0.1	68H002	Yes	High combustion temp. Restarted. Flare on.
4/22/2016	1723	2.5	68H002	Yes	High combustion temp. Restarted. Flare on.
4/26/2016	1415		68H002	Yes	High combustion temp. Restarted. Flare on.
4/26/2016	1915		68H002	Yes	High combustion temp. Restarted. Flare on.
4/26/2016	2056		68H002	Yes	High combustion temp. Restarted. Flare on.
4/26/2016	2251	3.0	68H002	Yes	High combustion temp. Restarted. Flare on.
4/27/2016	0007	0.1	68H002	Yes	High combustion temp. Restarted. Flare on.
4/28/2016	0020	0.4	68H002	Yes	High combustion temp. Restarted. Flare on.
4/28/2016	0250	1.0	68H002	Yes	High combustion temp. Restarted. Flare on.
4/28/2016	0427	4.0	68H002	Yes	High combustion temp. Restarted. Flare on.
4/28/2016	1400	1.0	68H002	Yes	High combustion temp. Restarted. Flare on.
4/29/2016	0630	4.5	68H002	Yes	Auto valve combustion blower replaced.
4/29/2016	1530	0.3	68H002	Yes	High combustion temp. Restarted. Flare on.
4/30/2016	0255	0.1	68H002	Yes	High combustion temp. Restarted. Flare on.
4/30/2016	1817	0.1	68H002	Yes	High combustion temp. Restarted. Flare on.
5/1/2016	0747	0.1	68H002	Yes	High combustion temp. Restarted. Flare on.
5/2/2016	0416	0.1	68H002	Yes	High combustion temp. Restarted. Flare on.
5/2/2016	1448	0.3	68H002	Yes	High combustion temp. Restarted. Flare on.
5/2/2016	1528	0.2	68H002	Yes	High combustion temp. Restarted. Flare on.
5/2/2016	1610	0.3	68H002	Yes	High combustion temp. Restarted. Flare on.
5/3/2016	0122	1.0	68H002	Yes	High combustion temp. Restarted. Flare on.
5/9/2016	1610	0.2	68H002	Yes	High combustion temp. Restarted. Flare on.
5/12/2016	1727	1.5	68H002	Yes	High combustion temp. Restarted. Flare on.
5/13/2016	1200	0.5	68H002	Yes	High combustion temp. Restarted. Flare on.
5/13/2016	1909	0.5	68H002	Yes	High combustion temp. Restarted. Flare on.
5/13/2016	2140	0.25	68H002	Yes	High combustion temp. Restarted. Flare on.
5/19/2016	0800	0.25	68H002	Yes	Shut down. Changed insert on process blower
6/2/2016	1730	0.25	68H002	Yes	High combustion temp. Restarted. Flare on.
01CE01 & 01CE02					
1/7/2016	1633	0.5	Polaris	Yes	Power lost. Restarted.
1/18/2016	0247	0.5	Polaris	Yes	High level P-01.Frozen, thawed it out, pumped out. Restarted.
1/23/2016	1530	1.0	Polaris	Yes	Blower off. Reset restarted.
1/23/2016	2029	1.0	Polaris	Yes	Fan stopped. No flow. Restarted.
1/23/2016	2202	0.5	Polaris	Yes	Fan stopped. No flow. Restarted.

1/24/2016	0000	7.0	Polaris	Yes	Fan stopped off/on. No flow. Restarted.
1/24/2016	0730	5.0	Polaris	Yes	Epsilon resetting off/on.
1/24/2016	1343	1.0	Polaris	Yes	Liquid in blower. Drained and started.
2/8/2016	0930	2.0	Polaris	Yes	XV-12 not opening. Bad fuse to air supply for valve.
2/11/2016	0135	0.5	Polaris	Yes	V02 tank full. Blower stopped. Reset, pumped.
3/20/2016	0451	0.6	Polaris	Yes	Blower stopped. Restarted.
4/4/2016	2026	0.5	Polaris	Yes	Blower stopped. Restarted.
4/27/2016	1500	1.0	Polaris	Yes	TT-23 high temp. Restarted.
6/20/2016	1755	0.5	Polaris	Yes	Alert pressure drop DPI - 09. Reset restarted

Notes:

Omitted from the Attachment A. SSMP list are a number of minor events involving the cryogenic condenser (duration < 0.5 hr) that did not effect emissions. The system is passive and contains a large reserve of refrigeration capacity. Even when the unit shuts down vent gases continue to pass through the system at temperatures well below the limit.

ATTACHMENT B**Detailed Information On CMS Downtime**

Control Device	Monitor ID	Date	Time	Duration, hrs
68H002	68TT300_3	03/13/2016	02:00	1.25
68H001	68TT6001	03/13/2016	02:00	1.25
68H002	68TT300_3	04/04/16	16:42	1.25
68H001	68TT6001	04/04/16	16:42	1.25

Note:

CMS for the TOx & Flare was lost for 2.5 hrs due to RS view communication loss to the server from power outages. During each event the control devices maintained performance test temperature limits (~ 1500 F TOx).

ATTACHMENT C

Information On Deviations On Systems With CMS

Table 63.2520 (e) (5) (iii) (C) Thermal Oxidizer 68H002 Start/End Date and Times of Temperature Deviations.					
Date of Deviation	Deviation Start Time	Deviation End Time	Duration, hrs	Cause	SSM?
No deviations from the temperature limit specified in Table 63.2520 (e) (5) (iii) (I)					

Table 63.2520 (e) (5) (iii) (C) 01CE01 & 01CE02 Cryogenic Condenser Start/End Date and Times of Temperature Deviations.					
Date of Deviation	Deviation Start Time	Deviation End Time	Duration	Cause	SSM?
06/11/16	12:00	23:59	24	Nitrogen supply	No shutdown
06/13/16 – 06/18/16	6/13/16 – 12:00	6/18/16 – 15:00	128	Nitrogen supply	No shutdown
06/20/16	12:00	23:59	24	Nitrogen supply	No shutdown
06/22/16 – 06/25/16	6/22/16 – 12:00	6/25/16 – 15:00	80	Nitrogen supply	No shutdown
06/27/16 – 06/28/16	6/27/16 – 12:00	6/28/16 – 23:59	48	Nitrogen supply	No shutdown

ATTACHMENT D**Copies of Operating Logs of Sources Using CMS for Compliance**

212

Postcard

- V340 leak more because of /cvc/

Xfered 1 fast from V441 to U584

Dry (then resampled - put in Lab. Ray Petri

Raf wanted to resample U30 before LOS POOR

Sending it out the level changed

John can you test it before Monday
pull sample

- Church

Can you give Kevin our love, if
will not contact to wife

I can not back up, Check sheet

- Container - Door Broke on it that
talked to WWTP last week

moved the Drums of Column Packing from behind stripper and wood and Drum

- Put the sheets on Boilers

Completed House Keeping sheets

Can you add oil to the 1/2 oil pump the oil is low

Church.

I will be in at 04:00 pm on Monday. I will text if things change.

Church 04/04/2014 1st

- Received turnover from John
- Started Filling county h₂O TK
- Went over equip. ✓ sheet with Ty M. & AL T. on #5 & #6 chiller. Also showed them how to check Freeze points. -16°
- pulled weekly h₂O samples
- picked up oil buckets out of #6 chiller, drained oil & ~~then~~ threw filter away in waste. Roll off
- Process h₂O sample failed, Blowing down cooling tower & refilling with process h₂O to try & flush out TK-101B
- Worked on Environmental #'s for Vince C.

Chris 04/04/2014 2nd

- Received turnover from Church
- Blew down #2 Boiler
- Completed Equipment Checksheet
- Completed Housekeeping Form
- Got key and phone from Guard
- When Parts room close time for maintenance
- Pulled V360 sample

135m	31	83x	120	15.7
259cm	3	94A	16.3	

Stop Blowing down cooling tower until 10:30 so I could sent V360
Cryo shut down logged in

- Pick up Alkal meter from Safety in drawer

- On Thurs' Fri Day shift

Thier is work being done in Alpha/Beta
2nd Floor Scott said it is thier Frist

Time here and there

Per Scott pulled PW well
head sample lossed in lab (Fail)
have printout on desk

- Stop X-feros 1340 to WTP
- started Blowing down Cooling tower at end of shift

John 3rd 04/07/2014

- Received turnover from Chris.
- Chiller Comp. 3-B down low oil Re start
- Reset The RO unit. 2XS
- Reset 3B High temp.
- Chiller 4 went from -16 to -4 in 10 mins
- Blew down boilers.
- Turned keys and phone into guard shack.

Church 4/5/14 1st

- Received turnover from John
- Wrote W.O. for changing R.O. Filter changed Filter's
- lowered set point on 4-C. loaded 100. running 400 Amp's & cooling down
- put in Reg. for two new chemical feed pumps for boilers
- Worked on MAC for boiler chemical feed pumps
- Worked on PT, LT, FTTT, list for Rosa. Green tags needed.

Date: 07/04/2014

FLARE 68-H001

Valve Position			Pressures				Level		Flare Gas (Totalized)	Blower Status	Flare Temp (F)
To Flare HV-6011	To Vent HV-6010	Blower By-Pass HV-6012	Flare Header Pipe (in. W.C.)	Flare Arrestor Differential (in. W.C.)	Main Gas Pressure (psig)	Pilot Gas Pressure (psig)	Knock Out Pot (in.)	Cond. Pot @ DI Dike (in.)			
OPEN	CLOSED	O/C	-2	< 6	15 - 20	15 - 20	< 6	< 6		ON	1400 - 2200
CB	C	C					0	0	875975	OFF	1532

Shift: CB
Initials:

THERMAL OXIDIZER 68-H002

Valve Position			Pressures				Comb. Air % FCV 300-1	Cond. Pot @ DI Dike (in.)	Flame Arrestor Inlet TE-100-1 (F)	Flare Stack Temp (F)	FT-6022 Process Flow (SCFM)	O ₂ %
To TOX FCV 100-1B	To Vent HV 601-OA	To Ground Flare HV-6022	Filter Sock Differential (in. W.C.)	Flare Arrestor Differential (in. W.C.)	Dilution Air % FCV 400-1	VFD% Speed DPAL 100-1						
OPEN	CLOSED	O/C						< 6	< 250	1475 - 1900	0 - 700	0 - 21
0	C	C	-1.9	5	100%	60	41	0	66	1501	125	67

Shift: CB
Initials:

Notes:

WORK ORDER - NORMAL

Work Order: 118915

Description: auto valve XV-12

Asset ID: CE-01-68	Model:	Sch Date: 2/8/2016
Asset: Cryogenic Condenser System	Serial No:	Add Date: 2/8/2016 10:20:18 AM
Procedure: LOCK-OUT/TAG-OUT AND SAFETY INS	Location: COOLING TOWER	Priority: 0
Master WO ID	Building: Gen Serv	Shift:
Requested By rchurch	Floor:	Room:
Telephone:	Elec Line:	Supervisor:
Request ID: 12901	Asset ShutDn: <input checked="" type="checkbox"/> Plant ShutDn: <input checked="" type="checkbox"/>	Status: Completed
Warranty: UnExp. Warr		Skill:
		Assigned To: JAMES COLEMAN

Labor:		Assigned To	Cost ID	Est Hrs	Rem Hrs	Reg	Over	Double	Other	Date
Craft Description	Labor Description									
Electrician		<input checked="" type="checkbox"/>		1.00	0.00					/ /

Task: 1 ID: 1A SAFETY SECTION

Description: Lock out Tag Out Tech findings

Safety: ☒ Text: -----Planner, Maint or E&I Supervisor, or Technical Services Manager:-----

Is this work covered by an RFC? ☐ No ☐ Yes RFC#: _____
 Explain to the technician(s) what change(s) are covered by the RFC. ☐

To be completed by the millwright:

Is this a direct change out? Same make, model, manufacturer, etc. ☐ Yes ☐ No

If no and the change is not specified in the RFC covering this job, an RFC must be generated. Do not proceed with the work

Mobile/Lift Equipment required: Is operator(s) trained on mobile/lift equipment? ☐ Yes ☐ NoForklift ☐ ☐ Yes ☐ No Man Lift ☐ ☐ Yes ☐ No Lull ☐ ☐ Yes ☐ NoVRC Lift (Pflow) ☐ ☐ Yes ☐ No ☐ Boom Truck ☐ ☐ Yes ☐ No Scissors Lift ☐ ☐ Yes ☐ NoCrane ☐ ☐ Yes ☐ No OTHER ☐ ☐ Yes ☐ No

-----To Be Completed By Plant Supervision Prior to Work Initiation:-----

General:

Plant Running ☐ ☐ ☐ ☐ ☐ ☐ Yes ☐ No Other Work Adjacent to this Work ☐ ☐ Yes ☐ NoIsolated Work Area With Barricade ☐ ☐ Yes ☐ NoUnderground Hazards Identified/Marked? ☐ ☐ Yes ☐ No

Hazards: (if Yes, list Hazards in/on/around immediate area)

Flammables/Hazardous Chemicals Within _____ FT

Electrical ☐ ☐ No Yes: _____ Chemical ☐ ☐ No Yes: _____Pneumatic ☐ ☐ No Yes: _____ Mechanical ☐ ☐ No Yes: _____Temperature ☐ ☐ No Yes: _____

If permits are required, record permit number:

Line Break ☐ ☐ No Yes: _____ LO/TO ☐ ☐ No Yes: _____Hot work ☐ ☐ No Yes: _____ Confined Space ☐ ☐ No Yes: _____

Plant Supervisor Responsible for Completing Safety Instructions:

Print Name_____
Signature Required

Technical Findings:

Comments: auto valve not working at cryo

Procedure Comments: LINED UP PROC SWITCHES
RUNNING FINE.

Completion Information:

Due Count/Meter

Date: _____ Supervisor: _____ Time On: _____ Current Count: _____

0

Shift: _____ Down Time: _____ Time Off: _____ Current Meter: _____

0

3V Inc.

WORK ORDER - NORMAL

Work Order: 118922

Description: change steam trap

Asset ID: CE-01-68 Model: Sch Date: 2/8/2016
 Asset: Cryogenic Condenser System Serial No: Add Date: 2/8/2016 12:38:16 PM
 Procedure: LOCK-OUT/TAG-OUT AND SAFETY INS Location: COOLING TOWER Priority: 0
 Master WO ID Building: Gen Serv Shift:
 Requested By R. Church Floor: Room: Supervisor:
 Telephone: Ext: Elec Line: Status: Open
 Request ID: 12908 Asset ShutDn: ☒ Plant ShutDn: ☒ Skill:
 Warranty: UnExp. Warr Assigned To:

Task: 1 ID: 1A SAFETY SECTION

Description: Lock out Tag Out Tech findings

Safety: ☒

Text: _____ Planner, Maint or E&I Supervisor, or Technical Services Manager: _____
 Is this work covered by an RFC? ☐ No ☐ Yes RFC#: _____
 Explain to the technician(s) what change(s) are covered by the RFC. ☐

To be completed by the millwright:

Is this a direct change out? Same make, model, manufacturer, etc. ☐ Yes ☐ No
 If no and the change is not specified in the RFC covering this job, an RFC must be generated. Do not proceed with the work

Mobile/Lift Equipment required: Is operator(s) trained on mobile/lift equipment? ☐ Yes ☐ No
 Forklift ☐ ☐ Yes ☐ No Man Lift ☐ ☐ Yes ☐ No Lull ☐ ☐ Yes ☐ No
 VRC Lift (Pflow) ☐ ☐ Yes ☐ No Boom Truck ☐ ☐ Yes ☐ No Scissors Lift ☐ ☐ Yes ☐ No
 Crane ☐ ☐ Yes ☐ No OTHER ☐ ☐ Yes ☐ No

To Be Completed By Plant Supervision Prior to Work Initiation: _____

General:

Plant Running ☐ ☐ ☐ ☐ ☐ Yes ☐ No Other Work Adjacent to this Work ☐ ☐ Yes ☐ No
 Isolated Work Area With Barricade ☐ ☐ Yes ☐ No

Underground Hazards Identified/Marked? ☐ ☐ Yes ☐ No

Hazards: (if Yes, list Hazards in/on/around immediate area)

Flammables/Hazardous Chemicals Within _____ FT

Electrical ☐ ☐ No Yes: _____Pneumatic ☐ ☐ No Yes: _____Temperature ☐ ☐ No Yes: _____

If permits are required, record permit number:

Line Break ☐ ☐ No Yes: _____Hot work ☐ ☐ No Yes: _____

Plant Supervisor Responsible for Completing Safety Instructions:

Print Name ☐ ☐ ☐Signature Required ☐ ☐

Technical Findings:

Comments: change steam trap on cryo

Completion Information:

Date: Supervisor: Time On: Current Count: Due Count/Meter: 0
 Shift: Down Time: Time Off: Current Meter: 0

WORK ORDER - NORMAL

Work Order: 121419

Description: Instrumentation, repair TV-03 on Cryo

Asset ID: CE-01-68	Model:	Sch Date: 6/24/2016
Asset: Cryogenic Condenser System	Serial No:	Add Date: 6/24/2016 8:38:28 AM
Procedure: LOCK-OUT/TAG-OUT AND SAFETY INS	Location: COOLING TOWER	Priority: 0
Master WO ID	Building: CRYO	Shift:
Requested By wcox	Floor: 4th	Room:
Telephone:	Ext:	Elec Line:
Request ID: 15320	Asset ShutDn: <input checked="" type="checkbox"/>	Plant ShutDn: <input checked="" type="checkbox"/>
Warranty: UnExp. Warr		Supervisor:
		Status: Open
		Skill:
		Assigned To:

Task: 1 ID: 1A SAFETY SECTION Description: Lock out Tag Out Tech findings

Safety: ☒

Text: -----Planner, Maint or E&I Supervisor, or Technical Services Manager:-----

Is this work covered by an RFC? ☐ Yes ☐ No RFC#: ☐Explain to the technician(s) what change(s) are covered by the RFC. ☐

To be completed by the millwright:

Is this a direct change out? Same make, model, manufacturer, etc. ☐ Yes ☐ No

If no and the change is not specified in the RFC covering this job, an RFC must be generated. Do not proceed with the work

Mobile/Lift Equipment required: Is operator(s) trained on mobile/lift equipment? ☐ Yes ☐ NoForklift ☐ Yes ☐ No Man Lift ☐ Yes ☐ No Lull ☐ Yes ☐ NoVRC Lift (Pflow) ☐ Yes ☐ No Boom Truck ☐ Yes ☐ No Scissors Lift ☐ Yes ☐ NoCrane ☐ Yes ☐ No OTHER ☐ Yes ☐ No

-----To Be Completed By Plant Supervision Prior to Work Initiation:-----

General:

Plant Running ☐ Yes ☐ No Other Work Adjacent to this Work ☐ Yes ☐ NoIsolated Work Area With Barricade ☐ Yes ☐ NoUnderground Hazards Identified/Marked? ☐ Yes ☐ No

Hazards: (if Yes, list Hazards in/on/around immediate area)

Flammables/Hazardous Chemicals Within _____ FT

Electrical ☐ Yes: _____ Chemical ☐ Yes: _____Pneumatic ☐ Yes: _____ Mechanical ☐ Yes: _____Temperature ☐ Yes: _____

If permits are required, record permit number:

Line Break ☐ Yes: _____ LO/TO ☐ Yes: _____Hot work ☐ Yes: _____ Confined Space ☐ Yes: _____

Plant Supervisor Responsible for Completing Safety Instructions:

Print Name_____
Signature Required

Technical Findings:

Comments: Instrumentation, repair TV-03 on Cryo

Completion Information:

Due Count/Meter

Date: <input type="text"/>	Supervisor: <input type="text"/>	Time On: <input type="text"/>	Current Count: <input type="text"/>	0
Shift: <input type="text"/>	Down Time: <input type="text"/>	Time Off: <input type="text"/>	Current Meter: <input type="text"/>	0

John

03/13/2016

2-6

- Received turnover from Chris.
- Moved the Glycol totes from the service Isle to be behind the shop.
- Closed the County water valve to the tank (High level)
- Blew down both boilers.
- Nitrogen truck made a delivery.
- Walked through plants.
- Turned in Keys, phone.

Church

3/14/16

1st

- Received turnover from John
- Reset Tox down on high temp
- Worked on getting Beta back on #4 chiller. Started chiller, closed valves in high line, pulled pancake & started MP 329 A. Work with Maint.
- Tox down again high temp. Restarted
- Took pictures of Cryo + gave to Scott
- Tox down again Flame Failure. Restarted
- Sending V-360 to WWT.P.
- Filling county h2o TK
- Turned chiller training forms into Rosa

Chris

03/14/2016

2nd

- Received turnover from Church
- Received 4 Bottles of R22 from United Refrigeration - then gave them 4 empty
- Scott called about Tox - when the stick had been installed - How many times it shut down
- Tox 11

ATTACHMENT E

New Operating Scenarios

Beginning on 6/6/16 – 6/30/2016 3V Sigma USA began manufacturing a new product Plastol H in existing equipment previously used for the Regal 2B manufacturing process regulated under the Pharma MACT. Plastol H is a UV-absorber applied in plastics formulations.

The environmental regulatory department submitted a 502b10 Title V Operational Permit Flexibility notification to James Robinson PE - SC DHEC BAQ Engineering Services documenting the change. Plastol H manufacturing decreased overall facility HAP, TAP, and VOC emissions. This is due to the fact the Plastol H process requires significantly less xylene (raw material – HAP) than Regal 2B production. In the future 3V Sigma will continue to campaign between Plastol H and Regal 2B production. At no time will both processes operate in parallel.

Plastol H manufacturing – See submitted 502b10 Operational Flex Notification submitted to SC DHEC BAQ Engineering Services					
<u>MCPU</u>	<u>Process</u>	<u>Equip ID</u>	<u>Use</u>	<u>Category</u>	<u>Control Device</u>
04 – Alpha/Beta/Epsilon Plant	Plastol H	R301	Reactor 301	HAP	68H002
04 – Alpha/Beta/Epsilon Plant	Plastol H	V301	R301 accumulator	HAP	68H002
04 – Alpha/Beta/Epsilon Plant	Plastol H	R101	Reactor 301	HAP	68H002
04 – Alpha/Beta/Epsilon Plant	Plastol H	R305	Reactor 305	HAP	68H002
04 – Alpha/Beta/Epsilon Plant	Plastol H	R308	Reactor 308	HAP	68H002
04 – Alpha/Beta/Epsilon Plant	Plastol H	R302A	Reactor 302A	HAP	68H002
04 – Alpha/Beta/Epsilon Plant	Plastol H	SE301	Crystallizer 301	HAP	68H002
04 – Alpha/Beta/Epsilon Plant	Plastol H	TF318	Filtration of product	n/a	68H002
04 – Alpha/Beta/Epsilon Plant	Plastol H	V349	Dist accumulator	HAP	68H002
04 – Alpha/Beta/Epsilon Plant	Plastol H	V313A	Vessel 313A	HAP	68H002

<u>MCPU</u>	<u>Process</u>	<u>Equip ID</u>	<u>Use</u>	<u>Category</u>	<u>Control Device</u>
09 – Tank Farm (Kb Tanks)	Plastol H	V324A	Xylene tank	HAP	68H002
09 – Tank Farm (Kb Tanks)	Plastol H	V324B	Xylene tank	HAP	68H002
04 – Alpha/Beta/Epsilon Plant	Recovery xylene from Plastol H	VA534	Mixing vessel 534	HAP	68H002
04 – Alpha/Beta/Epsilon Plant	Recovery xylene from Plastol H	C505	Recovery column 505	HAP	68H002
04 – Alpha/Beta/Epsilon Plant	Recovery xylene from Plastol H	V583	Reflux accumulator for C505	HAP	68H002

ATTACHMENT F

Subpart UU LDAR Report

SEMIANNUAL COMPLIANCE REPORT FOR MON LDAR PROGRAM

REPORTING PERIOD:

1 Jan to 30 June 2016

63.1039 Report Requirement b (1)

b(1)(i) VALVES: Unit ID's 04, 05, 06, 07, 08, 09	
Monitoring Dates:	See Reporting Period.
No. Valves Monitored During Period:	0
No. Valves Leaking During Period:	0
No. of Valves - Leak Not Repaired:	0
Monitored Valve Leakage Rate:	#DIV/0! V ₂
Required Monitoring Frequency:	Annually

b(1)(ii) PUMPS: All Subpart FFFF Units

Date Monitored:	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Total
No. Pumps Monitored During Period:	65	93	82	77	87	76	480
No. Pumps Leaking During Period:	0	0	0	0	0	0	0
No. Pumps Not Monitored During Period:	0	0	0	0	0	0	0
Leakage Rate:	0%	0%	0%	0%	0%	0%	0.0%
No. of Pumps for which Leak Not Repaired:	0	0	0	0	0	0	0

b(1)(iii) CONNECTORS (In accordance with 63.2480(b)(4), the facility will comply with 63.1029)

No reporting required.

b(1)(iv) AGITATORS All Subpart FFFF Units								
	Date Monitored:	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Total
No. Agitators Monitored During Period:		34	34	35	47	34	28	212
No. Agitators Leaking During Period:		0	0	0	0	0	0	0
No. Agitators Not Monitored During Period:		0	0	0	0	0	0	0
Leakage Rate:		0%	0%	0%	0%	0%	0%	0.0%
No. of Agitators for which Leak Not Repaired:		0	0	0	0	0	0	0

b(1)(v) COMPRESSORS
No compressors in HAP service.

(b)(2) Delay of Repair.
No. of Delay of Repair Events: 0

(b)(3) Valve Subgrouping Information of 63.1025(b)(4)(I)
Not Applicable

(b)(4) PRESSURE RELIEF DEVICES GV SERVICE
Date of Test: None
Concentration [ppm]: NA

(b)(5) Initiation of monthly monitoring for valves:
Not Applicable

(b)(6) Quality improvement program for pumps
Not required due to low leak rate for pumps.

(b)(7) Alternative means of emission limitations.
Pressure test report attached.

(b)(8) No units with later compliance dates at the facility.

ATTACHMENT F

**ADDENDUM 1
FID MONITORING DETAIL**

FID MONITORING DETAILS BY AREA

Jan-16

Unit ID	Pumps				Agitators			
	Tested	New Leaks	Missed	Unsafe	Tested	New Leaks	Missed	Unsafe
04 - Alpha/Beta	21	0	0	0	14	0	0	0
05 - Gamma	13	0	0	0	6	0	0	0
06 - Delta	14	0	0	0	14	0	0	0
04 - Epsilon	12	0	0	0	0	0	0	0
09 & 10 - Tank Farm	16	0	0	0	0	0	0	0
Totals	76	0	0	0	34	0	0	0
	100.0%	0.0%	0.0%		100.0%	0.0%	0.0%	

Feb-16

Unit ID	Pumps				Agitators			
	Tested	New Leaks	Missed	Unsafe	Tested	New Leaks	Missed	Unsafe
04 - Alpha/Beta	27	0	0	0	14	0	0	0
05 - Gamma	13	0	0	0	6	0	0	0
06 - Delta	14	0	0	0	14	0	0	0
04 - Epsilon	20	0	0	0	0	0	0	0
09 & 10 - Tank Farm	19	0	0	0	0	0	0	0
Totals	93	0	0	0	34	0	0	0
	100.0%	0.0%	0.0%		100.0%	0.0%	0.0%	

Mar-16

Unit ID	Pumps				Agitators			
	Tested	New Leaks	Missed	Unsafe	Tested	New Leaks	Missed	Unsafe
04 - Alpha/Beta	25	0	0	0	15	0	0	0
05 - Gamma	13	0	0	0	6	0	0	0
06 - Delta	14	0	0	0	14	0	0	0
04 - Epsilon	11	0	0	0	0	0	0	0
09 & 10 - Tank Farm	19	0	0	0	0	0	0	0
Totals	82	0	0	0	35	0	0	0
	100.0%	0.0%	0.0%		100.0%	0.0%	0.0%	

Apr-16

Unit ID	Pumps				Agitators			
	Tested	New Leaks	Missed	Unsafe	Tested	New Leaks	Missed	Unsafe
04 - Alpha/Beta	27	0	0	0	27	0	0	0
05 - Gamma	0	0	0	0	6	0	0	0
06 - Delta	14	0	0	0	14	0	0	0
04 - Epsilon	17	0	0	0	0	0	0	0
09 & 10 - Tank Farm	19	0	0	0	0	0	0	0
Totals	77	0	0	0	47	0	0	0
	100.0%	0.0%	0.0%		100.0%	0.0%	0.0%	

May-16

Unit ID	Pumps				Agitators			
	Tested	New Leaks	Missed	Unsafe	Tested	New Leaks	Missed	Unsafe
04 - Alpha/Beta	27	0	0	0	14	0	0	0
05 - Gamma	13	0	0	0	6	0	0	0
06 - Delta	14	0	0	0	14	0	0	0
04 - Epsilon	14	0	0	0	0	0	0	0
09 & 10 - Tank Farm	19	0	0	0	0	0	0	0
Totals	87	0	0	0	34	0	0	0
	100.0%	0.0%	0.0%		100.0%	0.0%	0.0%	

Jun-16

Unit ID	Pumps				Agitators			
	Tested	New Leaks	Missed	Unsafe	Tested	New Leaks	Missed	Unsafe
04 - Alpha/Beta	19	0	0	0	8	0	0	0
05 - Gamma	13	0	0	0	6	0	0	0
06 - Delta	14	0	0	0	14	0	0	0
04 - Epsilon	11	0	0	0	0	0	0	0
09 & 10 - Tank Farm	19	0	0	0	0	0	0	0
Totals	76	0	0	0	28	0	0	0
	100.0%	0.0%	0.0%		100.0%	0.0%	0.0%	

LEAK LOG FOR MON REPORT JAN 1, 2016 - JUNE 30, 2016							
Leak Date	Component	Equipment	Initial Reading (ppm)	First Attempt Date	Final Repair Date	Final Reading (ppm)	Comments
No leaks monitored during reporting period							

ATTACHMENT F**ADDENDUM 3
PRESSURE TEST REPORT**

Annual pressure testing of storage tanks and process equipment completed during this reporting period are included in the following attachment. Any storage tank that was not tested during the first half of 2016 will be tested and reported on the next semi-annual report

Process equipment is being checked using method 21, and the components checked are included in Subpart UU report. Pressure testing is not being used as a compliance method for process equipment.

PRESSURE TEST REPORT FOR PERIOD JAN 1, 2016 TO JUNE 30, 2016

Eq. ID	No. Tests	No. Fails	Facts Re DoR	Date
02TK210	26	0	main TF	weekly
03C305	1	0	a/b	3/16/16
03D130	1	0	a/b	3/16/16
03D131	1	0	a/b	1/4/16
03D301	n/a	n/a	a/b (not in use)	n/a
03FP301	1	0	a/b	1/4/16
03FP303	1	0	a/b	1/4/16
03FP401	1	0	a/b	3/16/16
03R101	1	0	a/b	1/4/16
03R150	n/a	n/a	a/b (not in use)	n/a
03R151	1	0	a/b	1/4/16
03R301	1	0	a/b	1/4/16
03R302A	1	0	a/b	1/4/16
03R302B	1	0	a/b	3/16/16
03R304	1	0	a/b	3/16/16
03R305	1	0	a/b	1/4/16
03R307	1	0	a/b	1/4/2016
03R308	1	0	a/b	1/4/16
03SE301	1	0	a/b	1/4/16
03SE302	1	0	a/b	1/4/16
03TK111	1	0	a/b	1/4/16
03TK311	n/a	n/a	main TF (no HAP)	n/a
03TK338	n/a	n/a	main TF (no HAP)	n/a
03TK382	n/a	n/a	main TF (no HAP)	n/a
03V322	n/a	n/a	a/b (no HAP)	n/a
03V323	1	0	a/b	1/4/16
03V324A	1	0	a/b	1/4/16
03V358	1	0	a/b	3/16/16
03V375	1	0	a/b	3/16/16
03V376	1	0	a/b	3/16/16
03V380	n/a	n/a	a/b (no HAP - WW)	n/a
03VA301	1	0	gamma	4/20/16
04R403	1	0	gamma	5/23/16
04R406	1	0	main TK farm	weekly
04TK411	26	0	epsilon	5/26/16
05C503	1	0	epsilon	1/25/16
05C504	1	0	epsilon	1/24/16
05C505	1	0	main TK farm	weekly
05TK519	26	0	epsilon	5/26/16
05V575	1	0	epsilon	5/26/16
05V576	1	0	epsilon	5/26/16